

Application No.: 10/800,230

APR 26 2007
Office No.: TOW-067**AMENDMENTS TO THE SPECIFICATION**

On page 6, please replace line 2 with the following line:

(2) $\text{CH}_4 + 2\text{H}_2\text{O} \rightarrow \text{CO}_2 + 4\text{H}_2$ (endothermic reaction)

On page 10, please replace the paragraph starting at line 18 with the following paragraph:

The reformer 30 induces oxidation reaction $\text{CH}_4 + 2\text{O}_2 \rightarrow \text{CO}_2 + 2\text{H}_2\text{O}$ (exothermic reaction) and fuel reforming reaction $\text{CH}_4 + 2\text{H}_2\text{O} \rightarrow \text{CO}_2 + 4\text{H}_2$ (exothermic reaction) simultaneously.

On page 12, please replace the paragraph starting at line 10 with the following paragraph:

The conventional high temperature shifting reactor is not required. The simple can compact PSA mechanism 24 can be used efficiently for inducing the desired reforming reaction rapidly. The hydrogen-rich pure fuel gas can be produced efficiently.